

ENTOMOLOGICAL NEWS

VOL. LX

MARCH, 1949

No. 3

The Status of the Genus *Antineura* Melander (Diptera, Agromyzidae)

By A. L. MELANDER, Riverside, California

Mr. Kenneth E. Frick, a student of the Agromyzidae, of the University of California, Berkeley, has referred to me a problem in nomenclature. I am grateful to him for furnishing some of the following data not available at Riverside.

In 1913 (Jour. New York Ent. Soc., XXI: 249) I erected the genus *Antineura* for three American species of Agromyzidae (*togata* n. sp., *chlamydata* n. sp., and *Phytomyza palliata* Coquillett), designating *togata* as the type of the genus.

In 1914 (Ent. Mitteil., III: 73) in an article dealing with Namensänderungen Friedrich Hendel called attention to the prior use of the name *Antineura* by Osten Sacken, in 1881, for a genus of Platystominiæ, and proposed the name *Haplomyza* to replace the homonym, without citation of the genotype, though mentioning that he knew an European species of the genus.

In 1918 (Arch. f. Naturges., 84A: 114, published in 1920) in the prodomus to his monograph of the palæarctic Agromyzidae Hendel separated *Haplomyza* from *Liriomyza* by the absence of the posterior crossvein. Disregarding the usual custom of retaining the genotype of the homonym, Hendel designated the European *xanthaspis* Loew as the type of *Haplomyza*. In this paper (page 145) Hendel gave a synoptic key to *atronitens* Hendel (? *heteroptera* Loew), *xanthaspis* Loew and *latigenis* Hendel, as the European species of *Haplomyza*. Based on their descriptions he mentioned the possible inclusion of *H. balonica* Strobl and *H. Ticffi* Strobl.

In 1927 (Zool. Anz., LXIX: 250) in Beiträge zur Systematik der Agromyziden Hendel thought that *Haplomyza* was polyphyletic and dismembered the genus, assigning *xanthaspis* and *latigenis* "without constraint" to *Liriomyza*, and *atronitens* to *Cerodontha*. Strobl's two species Hendel later placed in the subsequently erected genus *Xeniomyza*. Thus *Haplomyza* is left for the forgotten American species alone.

In 1932 (Flieg. pal. Reg., Agromyzidae, 59: 198) Hendel revived *Haplomyza*, this time as a subgenus of *Liriomyza*, again citing *xanthaspis* as the type. Six additional species were tabulated, but as all of them possess the posterior crossvein Hendel's concept of *Haplomyza* had completely changed.

In 1934 (Tijdschr. Ent., 77: 288-290) in Die Larven der Agromyziden, zweiter Nachtrag, deMeijere described a larva and puparium under the name *Xeniomyza* Hering, n. g. in litt; *X. illicitensis* Hering, n. sp. in litt. He stated that the adult is the smallest known Agromyzid, and would be described later by Hering.

In 1936 (the concluding part of the Agromyzidae of the Fliegen der palaearktischen Region, p. 516) Hendel described the adult of *Xeniomyza*, citing it as *Xeniomyza*, n.g., Hering in litt, with genotype *X. illicitensis*, n. sp., Hering in litt. Disregarding his former use of the name *Haplomyza*, Hendel stated that *Xeniomyza* is the same as the preoccupied *Antineura* Melander. According to nomenclatorial convention *Xeniomyza* should be credited to deMeijere, 1934, and not to Hendel, 1936, nor to Hering, because (1) the earlier description of a larva has priority over the later description of the adult, and (2) an author is held responsible for the names and descriptions he publishes and cannot convey authorship merely by citing "in litt."

Antineura Melander was originally characterized as differing from *Agromyza* by the absence of the posterior crossvein, while it differs from *Phytomyza* in that the costa extends to the fourth vein. The species have yellow humeri and nearly all of the head is also yellow. The postvertical bristles are strong. The base of the anal vein is distinct and the fifth vein is widely divergent.

In togata the fourth vein ends plainly before the tip of the wing; in *chlamydata* the end of the fourth vein bends back to terminate at the apex of the wing.

The European *Haplomyza*, as used in the Fliegen der palaearktischen Region, was separated from *Liriomyza* by having the humeri wholly brown to black, the head mostly black, only partly on the front and the cheeks yellowish brown, and the frontal orbits about one-third the width of the front. With this characterization the American species do not fully conform. Of the seven species placed in 1931 in *Haplomyza* only *xanthaspis* lacks the posterior crossvein, so at that time Hendel relied more on color and the structure of the front than on the incomplete venation.

Xeniomyza was defined as differing from *Liriomyza* mainly in the absence of the postvertical bristles, the termination of the fourth vein plainly before the tip of the wing with the costa extending a little beyond the fourth vein, the posterior crossvein completely lacking and the anal vein represented only as a fold. Again the American species do not concur.

Although many of the generic distinctions in the Agromyziidae are subject to wide variation, it appears that at least three lines of descent are represented here. Therefore the names *Antineura* Melander, *Haplomyza* as later construed by Hendel, and *Xeniomyza* deMeijere-Hendel-Hering do not all apply to only a single genus, i.e. the original homonym *Antineura*. Under the rules of nomenclature, *Antineura* Melander is definitely a homonym and is to be replaced by *Haplomyza* Hendel, 1914, which is a valid name published to take over the species placed in the preoccupied genus *Antineura*. But the genotype is still *togatus* Melander. If taxonomically the European species placed in the modified concept of *Haplomyza* are not congeneric with the three American species then they require a new generic, or subgeneric, name, for nomenclatively *Haplomyza* belongs irrevocably to *togatus* and its two related American species. The genus *Xeniomyza* has no direct relationship to *Antineura* Melander, and Hendel's citation of the synonymy is in error.

Mr. Frick has investigated the life cycle of *Haplomyza togata* from a long series of material, and has records of the larva, puparia, type of mine and adult genitalia. He informs me that the genitalia are very different from those of either *Liriomyza* or *Phytomyza*.

An Unnoticed Character in the Saturnioidea (Lepidoptera)

By EUGENE G. MUNROE, Institute of Parasitology,
Macdonald College, Quebec, Canada

The conspicuous armature of spines or warts which characterizes the larvae of most of the Saturnioidea has attracted the attention of all workers who have studied this group. The characters presented by the more dorsal rows of spines are so striking that the less prominent but equally interesting subventral series (corresponding to primary setae vii in Forbes' system) appears heretofore to have been neglected.

It may be assumed that the primitive condition is that in which the subventral row is complete, being represented on each of the segments from thoracic 1 to abdominal 9. This complete distribution is seldom realized, in most genera the subventral spines being absent from some segments, while in a few forms the whole series is suppressed. The resulting distribution patterns appear to characterize major groups, and may some day prove useful in a definitive study of the classification of the superfamily.

Thanks principally to the magnificent illustrations in Packard's (1905; 1914) monograph, supplemented by descriptions and illustrations in Jordan (1922; 1924), Forbes (1923), Kirby (1907), and South (1920), and to a very limited extent by my own examination of preserved material, I have been able to ascertain the segmental distribution of the spines of this series in a fairly representative, though not very numerous, array of